

**REMARKS****I. General**

Claims 1-4, 6-34, 36-47 and 62-63 are pending in this application.

- Claims 1, 6, 9-12, 14, 22, 33, 34, 36, 37, and 42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication 2002/0077113 A1 to Spaling et al. (hereinafter “Spaling”) in view of U.S. Patent Publication 2002/0001337 A1 to Chauncey et al (hereinafter “Chauncey”).
- Claims 2 and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of U.S. Patent Publication 2004/0203714 A1 to Van Lieshout et al. (hereinafter “Van Lieshout”).
- Claims 3 and 39 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of U.S. Patent Publication 2002/0196749 A1 to Eyuboglu et al. (hereinafter “Eyuboglu”).
- Claims 4, 40, and 47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of U.S. Patent Publication 2002/0174441 A1 to Marin et al. (hereinafter “Marin”).
- Claims 5, 28-32, and 35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey.
- Claims 7, 8, 13, 62, and 63 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of U.S. Patent 6,275,990 B1 to Dapper et al. (hereinafter “Dapper”).
- Claims 15-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of U.S. Patent Publication 2002/0126704 A1 to Cam et al. (hereinafter “Cam”).

- Claim 21 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling Chauncey in further view of Cam and further in view of U.S. Patent Publication 2003/0043738 A1 to Barsheshet (hereinafter “Barsheshet”).
- Claims 23-27, and 43-45 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of U.S. Patent Publication 2003/0161386 A1 to Schilling (hereinafter “Schilling”).
- Claim 41 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of Barsheshet.
- Claim 46 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of Schilling and further in view of Barsheshet.

Applicant hereby traverses the rejections of record and requests reconsideration and withdrawal of such in view of the remarks contained herein.

## **II. Rejections Under 35 U.S.C. § 103**

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art cited must teach or suggest all the claim limitations. *See* M.P.E.P. § 2143. Without conceding that the second criteria is satisfied, Applicant respectfully asserts that the Examiner’s rejection fails to satisfy the first and third criteria.

### **Failure to Teach or Suggest Every Claim Limitation**

- A. Claims 1, 6, 9-12, 14, 22, 33, 34, 36, 37, and 42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey.

Claim 1 recites “a first subscriber subsystem” and “a second subscriber subsystem.” In the Final Action the Examiner points to Spaling’s Radio Network Controller (RNC) as satisfying the recited first subscriber subsystem and Spaling’s base station as satisfying the second subscriber subsystem. *See* Final Action, pgs. 2-3. Applicant notes, however, that each of Spaling’s RNC and base station are on the network side of a wireless communications system. *See, for example* Spaling at Figs. 1 & 5. As such, neither of Spaling’s RNC or base station can appropriately be equated with a subscriber subsystem. In fact, the only feature disclosed in Spaling that could be appropriately construed as a “subscriber subsystem” is a mobile station. Further, if Spaling’s RNC and base station are modified to be part of a subscriber unit (e.g., part of the mobile station subsystem), there wouldn’t be a need to effectuate communication between the mobile station, base station, and RNC. Instead, a mobile station user would simply communicate directly with another network on the “backside” of the RNC (shown as “other networks” in Fig. 1). Moving Spaling’s base station and RNC to a subscriber location would destroy the very purpose for having each in the first place. As such, Spaling fails to teach or suggest a first and second subscriber subsystem, as set forth in the claims. Put simply, it does not make sense to construe Spaling’s RNC or base station as a subscriber subsystem. Moreover, Chauncey is not relied upon to teach or suggest this missing limitation. Therefore, Applicant requests withdrawal of the rejection of record.

Claim 1 also recites wherein said first subscriber subsystem comprises an indoor unit subsystem and said second subscriber subsystem comprises an outdoor unit subsystem. In the Final Action the Examiner relies upon Chauncey to satisfy this limitation. *See* Final Action, pg. 5. However, Chauncey’s indoor unit and outdoor unit communicate via a modulated RF signal carried on a coaxial cable. Therefore, modifying Spaling as the Examiner suggests would require an analog link between a first and second subsystem. Of course, this proposed combination would not satisfy a first subscriber subsystem having a first digital interface or

second subscriber subsystem having a second digital interface, as set forth in the claim.

Therefore, Applicant requests withdrawal of the rejection of record.

Claim 33 recites “said first subscriber subsystem disposed at a subscriber location” and “a second subscriber subsystem disposed at said subscriber location.” In the Final Action the Examiner points to Spaling’s Radio Network Controller (RNC) as satisfying the recited first subscriber subsystem and Spaling’s base station as satisfying the second subscriber subsystem. *See* Final Action, pgs. 4-5. Applicant notes, however, that each of Spaling’s RNC and base station are on the network side of a wireless communications system. *See, for example* Spaling at Figs. 1 & 5. As such, neither of Spaling’s RNC or base station can appropriately be equated with a subscriber subsystem. In fact, the only feature disclosed in Spaling that could be appropriately construed as a “subscriber subsystem” is a mobile station. Further, if Spaling’s RNC and base station are modified to be part of a subscriber unit (e.g., part of the mobile station subsystem), there wouldn’t be a need to effectuate communication between the mobile station, base station, and RNC. Instead, a mobile station user would simply communicate directly with another network on the “backside” of the RNC (shown as “other networks” in Fig. 1). Put simply, it does not make sense to construe Spaling’s RNC or base station as a subscriber subsystem. As such, Spaling fails to teach or suggest a first and second subscriber subsystem, as set forth in the claims. Moreover, Chauncey is not relied upon to teach or suggest this missing limitation. Therefore, Applicant requests withdrawal of the rejection of record.

Claim 33 also recites “wherein said first signal processing subscriber subsystem comprises an indoor unit and said second signal processing subscriber subsystem comprises an outdoor unit.” In the Final Action the Examiner relies upon Chauncey to satisfy this limitation. *See* Final Action, pg. 5. However, Chauncey’s indoor unit and outdoor unit communicate via a modulated RF signal carried on a coaxial cable. Therefore, modifying Spaling as the Examiner suggests would require an analog link between a first and second subsystem. Of course, this proposed combination would not satisfy a first subscriber subsystem having a first digital interface or second subscriber subsystem having a second digital interface, as set forth in the claim. Therefore, Applicant requests withdrawal of the rejection of record.

Claims 6, 9-12, 14, and 22 depend from claim 1 and claims 34, 36, and 37 depend from claim 33, respectively. Each dependent claim inherits every limitation of the claim from which it depends. As shown above, the combination of Spaling and Chauncey does not teach or suggest every limitation of claims 1 and 33. As such, claims 6, 9-12, 14, 22, 34, 36, and 37 are patentable at least through their dependency on claims 1 and 33. Moreover, the dependent claims set forth additional limitations not taught by Spaling.

For example, claim 6 recites “wherein said first subscriber subsystem provides only digital processing of said subscriber data.” In the Final Action, the Examiner opines “all radio processing is preformed in the base station, meaning the RNC only performs digital processing of data.” *See* Final Action, pg. 6. As an initial matter, Applicant notes that simply because Spaling’s base station has radio processing module 68 does not mean that all analog processing is done at the base station. Moreover, Applicant notes that Examiner has failed to point out where, in Spaling, the RNC performs only digital processing, as set forth in the claim. In any event, Spaling’s RNC (which the Examiner equates to the first subscriber subsystem) is connected with external networks, such as a PSTN, through one or more network nodes like a packet radio service node. *See* Spaling, paragraph [0039]. This, of course, strongly suggests that radio processing is carried out in Spaling’s RNC. As such, As shown above, Spaling does not teach every limitation of Applicant’s invention. Therefore, Applicant requests withdrawal of the rejection of record.

Claim 10 recites “wherein said second subscriber subsystem provides all analog processing of said subscriber data provided by said system.” Applicant notes that Spaling discloses that its RNC (which the Examiner equates to the first subscriber subsystem) is connected with external networks, such as a PSTN, through one or more network nodes like a packet radio service node. *See* Spaling, paragraph [0039]. This, of course, strongly suggests that radio processing is carried out in Spaling’s RNC. As such, Spaling fails to teach wherein said second subscriber subsystem provides all analog processing, as set forth in the claim. Therefore, Applicant requests withdrawal of the rejection of record.

Claim 11 recites “wherein said second subscriber subsystem comprises a frequency converter for conversion between an intermediate frequency and a radio frequency.” Applicant notes that Spaling does not teach this limitation. Spaling, at paragraph [0048] merely shows its base station having channel processor that perform spreading and de-spreading operations. As shown above, Spaling does not teach every limitation of Applicant’s invention. Therefore, Applicant requests withdrawal of the rejection of record.

Claim 12 recites “wherein said second subscriber subsystem comprises at least one amplifier.” Applicant notes that Spaling does not teach this limitation. Spaling, at paragraph [0048] merely shows its base station having power controller performing power control operations based on its own measurements and messages received from the RNC and/or base station. Further, Applicant, in Spaling’s disclosure, where its base station (which the Examiner equates to a second subscriber subsystem) has an amplifier. There is no teaching that the power controller controls an amplifier, as the Examiner suggests. Therefore, Applicant requests withdrawal of the rejection of record.

- B. Claims 2 and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of Van Lieshout.

Claim 2 depends from claim 1 and claim 38 depends from claim 33, respectively. As shown above, the combination of Spaling and Chauncey does not teach or suggest every limitation of claims 1 and 33. Moreover, Van Lieshout is not relied upon to teach or suggest the missing limitations, nor does it do so. As such, these claims set forth limitations not taught or suggested by the Examiner’s proposed combination. Therefore, Applicant requests withdrawal of the rejection of record.

- C. Claims 3 and 39 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of Eyuboglu.

Claim 3 depends from claim 1 and claim 39 depends from claim 33, respectively. As shown above, the combination of Spaling and Chauncey does not teach or suggest every

limitation of claims 1 and 33. Moreover, Eyuboglu is not relied upon to teach or suggest the missing limitations, nor does it do so. As such, these claims set forth limitations not taught or suggested by the Examiner's proposed combination. Therefore, Applicant requests withdrawal of the rejection of record.

- D. Claims 4, 40, and 47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of Marin.

Claim 4 depends from claim 1, and claims 40 and 47 depend from claim 33, respectively. As shown above, the combination of Spaling and Chauncey does not teach or suggest every limitation of claims 1 and 33. Moreover, Marin is not relied upon to teach or suggest the missing limitations, nor does it do so. As such, these claims set forth limitations not taught or suggested by the Examiner's proposed combination. Therefore, Applicant requests withdrawal of the rejection of record.

- E. Claims 5, 28-32, and 35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey.

As an initial matter, please note that claims 5 and 35 have been cancelled. However, claims 28-32 depend from claim 1 and inherit every limitation therefrom. As shown above, the combination of Spaling and Chauncey does not teach or suggest every limitation of claim 1. As such, these claims set forth limitations not taught or suggested by the Examiner's proposed combination. Therefore, Applicant requests withdrawal of the rejection of record.

- F. Claims 7, 8, and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of Dapper.

Claims 7, 8, 13, 62, and 63 depend from claim 1 and inherit every limitation therefrom. As shown above, the combination of Spaling and Chauncey does not teach or suggest every limitation of claim 1. Moreover, Dapper is not relied upon to teach or suggest the missing limitations, nor does it do so. As such, these claims set forth limitations not taught or suggested

by the Examiner's proposed combination. Therefore, Applicant requests withdrawal of the rejection of record.

- G. Claims 15-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of Cam.

Claims 15-20 depend from claim 1 and inherit every limitation therefrom. As shown above, the combination of Spaling and Chauncey does not teach or suggest every limitation of claim 1. Moreover, Cam is not relied upon to teach or suggest the missing limitations, nor does it do so. As such, these claims set forth limitations not taught or suggested by the Examiner's proposed combination. Therefore, Applicant requests withdrawal of the rejection of record.

- H. Claim 21 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of Cam and further in view of Barsheshet.

Claim 21 depends from claim 1 and inherits every limitation therefrom. As shown above, the combination of Spaling and Chauncey does not teach or suggest every limitation of claim 1. Moreover, Barsheshet is not relied upon to teach or suggest the missing limitations, nor does it do so. As such, these claims set forth limitations not taught or suggested by the Examiner's proposed combination. Therefore, Applicant requests withdrawal of the rejection of record.

- I. Claims 23-27, and 43-45 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of Schilling.

Claims 23-27 depend from claim 1 and claims 43-45 depend from claim 33, respectively. As shown above, the combination of Spaling and Chauncey does not teach or suggest every limitation of claims 1 and 33. Moreover, Schilling is not relied upon to teach or suggest the missing limitations, nor does it do so. As such, these claims set forth limitations not taught or suggested by the Examiner's proposed combination. Therefore, Applicant requests withdrawal of the rejection of record.



- J. Claim 41 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of Barsheshet.

Claim 41 depends from claim 33 and inherits every limitation therefrom. As shown above, the combination of Spaling and Chauncey does not teach or suggest every limitation of claim 33. Moreover, Barsheshet is not relied upon to teach or suggest the missing limitations, nor does it do so. As such, these claims set forth limitations not taught or suggested by the Examiner's proposed combination. Therefore, Applicant requests withdrawal of the rejection of record.

- K. Claim 46 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Spaling in view of Chauncey in further view of Schilling and further in view of Barsheshet.

Claim 41 depends from claim 33 and inherits every limitation therefrom. As shown above, the combination of Spaling and Chauncey does not teach or suggest every limitation of claim 33. Moreover, neither of Barsheshet or Schilling is relied upon to teach or suggest the missing limitations, nor does they do so. As such, these claims set forth limitations not taught or suggested by the Examiner's proposed combination. Therefore, Applicant requests withdrawal of the rejection of record.

#### Lack of Motivation

In the Final Action the Examiner opines that it would have been obvious "to combine using a first and second subsystem disposed at a subscriber location with the first subsystem being an indoor unit and the second subsystem being an outdoor unit, as suggested by Chauncey, with the system and method of Spaling." *See* Final Action, pg. 5. However, "if the proposed modification would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. *In re Ratti*, 270 F.2d 810, 123 U.S.P.Q. 349 (CCPA 1959). In the case at hand, Spaling discloses that its "base stations are coupled to their corresponding radio network controller by a digital link

established via telephone lines, optical fiber links, microwave links, etc.” *See* Spaling at paragraph [0039]. According to the Examiner’s rationale Spaling would be modified so that its RNC is an indoor unit and its base station is an outdoor unit. As an initial matter, it would be impractical to place Chauncey’s RNC indoors, as doing so would likely require construction of a warehouse of some sort. In any event, in all likelihood, at least a portion of Spaling’s RNC would necessarily be placed outdoors to effectuate communication with a base station. Moreover, if we assume the user does not build a warehouse to surround the RNC, then the Examiner’s proposed combination would require that Spaling’s RNC undergo a substantial physical re-tooling to be placed indoors. This, of course, weighs against a determination of obviousness. *See In re Ratti*, 270 F.2d at 813 (reversing an obviousness rejection where the suggested combination would require a substantial reconstruction and redesign of the elements shown in the primary reference as well as a change in the basic principle under which the primary reference was designed to operate). For the reasons set forth above, Applicant submits there is no motivation to combine Spaling and Chauncey as the Examiner proposes.

As discussed above, the Examiner proposes modifying Spaling, in view of Chauncey, to satisfy a first and second subsystem disposed at the same subscriber location. However, in determining obviousness, “a prior art reference must be considered as a whole, including portions that would teach away from the claimed invention.” *See W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983). In the case at hand, Spaling discloses that its base stations are coupled to a corresponding RNC by a digital link. *See* Spaling, paragraph [0039]. In contrast, Chauncey teaches that its outdoor unit (which the Examiner equates to a second subsystem) communicates with the indoor unit (which the Examiner equates to a first subsystem) via a coax cable carrying a modulated RF signal. *See* Chauncey at paragraph [0106], Fig. 1. As such, Chauncey teaches away from the Examiner’s proposed combination in so much as it incorporates RF communication, as opposed to digital, between what the Examiner equates to a first subscriber subsystem and second subscriber subsystem. Further, the undesirability of incorporating a coax cable is mentioned in the present application, at for example, paragraphs [0022], [0023], and [0032]. In view of the above, there is no motivation to combine Spaling and

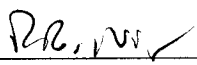
Chauncey as the Examiner proposes. Therefore, Applicant requests withdrawal of the 35 U.S.C. 103 of claims 1-4, 6-34, 36-47 and 62-63.

**III. Conclusion**

In view of the above remarks, Applicant believes the pending application is in condition for allowance. Applicant believes no fee is due with this response. However, if a fee is due, please charge Deposit Account No. 06-2380, under Order No. 68144/P007US/10501224 from which the undersigned is authorized to draw.

Dated: January 23, 2007

Respectfully submitted,

By   
R. Ross Viguet  
Registration No.: 42,203  
FULBRIGHT & JAWORSKI L.L.P.  
2200 Ross Avenue, Suite 2800  
Dallas, Texas 75201-2784  
(214) 855-8185  
(214) 855-8200 (Fax)  
Attorney for Applicant